



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Shuichi KITAMURA et al.

Group Art Unit: 1713

Serial Number: 10/500,082

Examiner: Michael Bernshteyn

Filed: June, 24, 2004

For: Polyvinyl alcohol film

DECLARATION UNDER 37 CFR 1.132

Commissioner for Patents
Washington, D.C. 20231

Sir:

Shuichi Kitamura residing at c/o THE NIPPON SYNTHETIC CHEMICAL INDUSTRY CO., LTD., Functional Film Development Center, 35, Kanda-cho 2-chome, Ogaki, Gifu, Japan duly deposes and says:

1. That he graduated from Department of Applied Chemistry, Faculty of Engineering, Osaka Institute of Technology, Osaka, Japan, in the year 1986;

2. That since 1991, he has been employed in THE NIPPON SYNTHETIC CHEMICAL INDUSTRY CO., LTD.;

3. That from 1991 he has been engaged in research and development on polyvinyl alcohol films;

4. That he has read and is familiar with the instant application for United States Letters Patent and Office Action thereto mailed April 7, 2006; and

5. That he has made experiments in order to prove that glass transition temperature of the polyvinyl alcohol film disclosed in

JP-43-1487 is out of the range of the present invention.

EXPERIMENTS

Samples

Polyvinyl alcohol films were prepared as in the same manner disclosed in Examples 1 to 3 of the present specification.

Evaluation

Measurement of elongation and breaking strength

Elongation and breaking strength were measured according to the method of ASTM-8820 under conditions of test speed of 500 mm/minute, 23°C and 50% RH. The results of samples obtained in the same manner of Example 1 to 3 are shown in Table I .

Results and Discussion

Results of elongation and breaking strength of samples are shown in Table I .

Table I

	Ex. 1	Ex. 2	Ex. 3
Glass transition temperature (°C)	6	8	8
Elongation (EB) (%)	220	210	330
Breaking strength (TR) (kg/cm ²)	142	153	184

As shown in the above Table I , elongation of Examples 1 to 3 was 220, 210 and 330%, respectively.

JP-A-43-1487 discloses elongation of the polyvinyl alcohol film

at 20°C. Results of elongation in Examples 1 to 8 of JP-A-43-1487 is shown as Table II (reprint of Table 1 and 2 in JP-A-43-1487).

Table II

	Ex. 1	Ex. 2	Ex. 3	Ex. 4	Ex. 5	Ex. 6	Ex. 7	Ex. 8
Elongation (EB) (%)	34	34	30	32	30	43	70	60

As shown in the above Table II, elongation of Examples 1 to 8 of JP-A-43-1487 was 30 to 70%.

The results represent that elongation of Examples 1 to 3 are large, since their glass transition temperature is lower than the measured temperature of elongation. Consequently, the glass transition temperature of the film disclosed in JP-A-43-1487 is more than 20°C which is the measured temperature of elongation.

The undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

This 28th day of June, 2006

by Shuichi Kitamura
Shuichi Kitamura

We, the undersigned witnesses, hereby acknowledge that Shuichi Kitamura is personally known to us and did execute the foregoing Declaration in our presence on:

Date: June 28, 2006

Witness Shinji Kashiwagi

Date:

Witness _____